

I CLAIM:

1. A grip suitable for triggering a firing actuator of a gun, the subassembly comprising:

5 a frame adapted for mounting to the gun;
a trigger movably secured to said frame;
a sensor positioned to detect a pull of said trigger;

a linear motor adapted for mechanical coupling to said firing actuator;

10 a source of electric power;
a pulsation power controller electrically connected to said sensor, said power source and said linear motor for energizing said linear motor with a pulsating signal in response to a trigger pull.

15 2. The grip according to claim 1 wherein said linear motor is a solenoid.

3. The grip according to claim 1 wherein said pulsation power controller includes a switch in a circuit connecting said linear motor to said power source and an oscillating signal generator connected to control the operation of said switch.

4. The grip according to claim 3 wherein said switch is a MOSFET transistor.

25 5. The grip according to claim 3 wherein said oscillating signal generator is resident on a microcontroller integrated circuit.

6. The grip according to claim 1 further comprising a low-resistance energy trap in a circuit connecting said power source to said linear motor.

30 7. The grip according to claim 6 wherein said low-resistance energy trap is a discrete capacitor.

8. The grip according to claim 1 wherein said pulsation power controller includes an adjustable frequency output.

9. The grip according to claim 1 wherein said source of electric power is a battery.

10. A power-assisted gun trigger subassembly suitable for mounting to a gun having a mechanical firing mechanism:

a grip frame;

a trigger movably secured to said grip frame;

a trigger sensor secured to said grip frame and responsive to movement of said trigger;

10 a solenoid adapted for coupling to said firing mechanism;

a battery connector for providing a source of electrical energy;

15 a pulsation power controller connected to said solenoid, said trigger sensor and said batter connector.

11. The grip according to claim 10 wherein said pulsation power controller includes a switch in a circuit connecting said solenoid to said battery connector and an oscillating signal generator connected to control the operation of said switch.

12. The grip according to claim 11 wherein said switch is a MOSFET transistor.

13. The grip according to claim 11 wherein said oscillating signal generator is resident on a microcontroller integrated circuit.

14. The grip according to claim 10 further comprising a capacitor in a circuit connecting said battery connector to said solenoid.

15. A power-assisted gun trigger subassembly suitable for mounting to a gun having a trigger and a mechanical firing mechanism:

a solenoid adapted for coupling to said firing mechanism;

a trigger sensor responsive to movement of the trigger;
a battery;
a circuit connecting said battery to said
5 solenoid;
a switch in said circuit for controllably opening and closing said circuit;
a capacitor in said circuit;
an oscillating signal generator connected to
10 said trigger sensor and said switch for cycling said switch in response to movement of the trigger.

16. The grip according to claim 15 wherein said oscillating signal generator is resident on a microcontroller integrated circuit.

15 17. A method for triggering a gun having a trigger, a trigger pull sensor and a mechanical firing actuator linked to a solenoid, the method comprising:
detecting a trigger pull with said trigger pull sensor;
20 energizing said solenoid with an oscillating power signal when said trigger pull is detected.

18. The method according to claim 17 wherein said step of energizing said solenoid includes applying a varying frequency oscillating signal.

25 19. The method according to claim 17 wherein said step of energizing said solenoid includes applying a oscillating signal having a decreasing frequency.

20. The method according to claim 17 further comprising the step of storing energy from said battery
30 in a capacitor before detecting said trigger pull.